

**Wyoming Department of Environmental Quality  
Water Quality Division  
WYPDES (Wyoming Pollutant Discharge Elimination System) Program**

**STATEMENT OF BASIS**

**RENEWAL**

**APPLICANT NAME:** University of Wyoming

**MAILING ADDRESS:** University Station Box 3166  
Laramie, WY 82071

**FACILITY LOCATION:** Red Buttes Laboratory, which is located in NENW Section 21, Township 14N, Range 73W, Albany County. The wastewater will discharge to Lake Leazenby (2AB), North Platte River Basin

**PERMIT NUMBER:** WY0032336

The University of Wyoming's Red Buttes Environmental Biology Laboratory is located approximately nine miles south of the City of Laramie, Wyoming on Highway 287, at 990 South Hwy 287. The laboratory is used by University of Wyoming faculty, staff and students to conduct research on a wide range of aquatic, semi-aquatic and terrestrial organisms. At any given time, depending on research questions and funding, these may include aquatic organisms such as algae, invertebrates and fish; semi-aquatic organisms such as frogs, toads, mink and ducks; terrestrial animals such as hummingbirds, porcupines, rabbits, bighorn and domestic sheep, mule deer, pronghorn antelope and elk.

In the portion of the laboratory used for research with aquatic and semi-aquatic organisms, service and research projects have included breeding and culture (toads, frogs, fish), basic and applied physiology (aquatic invertebrates, fish, ducks), ecology (aquatic invertebrates, fish, ducks), and environmental toxicology (aquatic invertebrates, fish, frogs).

Two different kinds of wastewater effluent are produced during holding and experimental work with aquatic and semi-aquatic organisms: (1) Non-toxic wastewater effluent, similar to that of a fish hatchery, that contains suspended solids from breeding, culture, physiology and ecology research, and (2) potentially toxic wastewater effluents with added inorganic or organic chemical constituents, chemical mixtures, or agricultural or industrial wastewater effluents that are being tested in environmental toxicology research. These two different kinds of wastewater effluent and their treatment are addressed separately below.

(1) Non-Toxic Wastes: The wastewaters from the kinds of experimental research described above producing non-toxic waste streams (for instance, breeding, culture, physiology and ecology experiments), are normally routed directly to a sequence of three settling ponds to settle out any suspended solids prior to discharge to Lake Leazenby (class 2AB water). These settling ponds are used to hold a variety of fish and serve as biomonitoring ponds as described further below.

(2) Toxic Wastes: The wastewaters from environmental toxicology research where organic and/or inorganic toxins and other effluents or pollutant mixtures have been added to waters in the experiments

are routed to a treatment system inside the Red Buttes building. The treatment system allows for custom treatment of different kinds of potentially toxic wastewaters, and consists of:

- two wastewater sumps used to collect potentially toxic wastewaters, which can then be pumped through treatment/filtration system(s) appropriate for removal of the toxin(s) being studied,
- two sand filters used for removal of suspended solids so as to protect the carbon and ion exchange filtration systems,
- three activated carbon filters plumbed in series for removal of organic chemicals, and
- anion exchange unit with both anion and cation exchange beds for removal of metals and other inorganic ions.

The system is designed to custom treat different kinds of wastes -- for instance to remove suspended solids with the sand filters prior to wastes being pumped through the activated carbon filters to remove organic chemicals and/or the ion exchange unit to remove metals and other inorganics.

Following the indoor treatment system, the treated wastewater is then pumped to the series of three settling and fish holding ponds described above, where the treated wastewater is mixed with fresh artesian spring water. These ponds function as settling ponds and biomonitoring ponds to insure that no toxic compounds escape the indoor filtration/treatment system. After a period of time, the diluted water is released from the holding ponds and discharged to Lake Leazenby (class 2AB water).

Due to the wide variety of pollutants that could be used in the environmental toxicology experiments, it was determined that a traditional permit with specific effluent limitations and monitoring requirements would not be practical. Therefore, the permit contains numerous special conditions to insure protection of Lake Leazenby. Below is a summary of these conditions:

1. The treatment system must be operated at maximum capacity and efficiency, appropriate for the kinds of wastes being produced.
2. The volume of treated wastewater discharged from the filtration/treatment system may not exceed 6,000 gpd.
3. Prior to discharge to Lake Leazenby, the wastewater must be diluted to at least a 1:50 ratio with uncontaminated artesian spring water.
4. The diluted water (artesian spring water and treated effluent) must be routed through three holding ponds. These ponds must contain a variety of fish species including trout.
5. The health and vitality of the fish in the holding ponds must be monitored on a daily basis. If the health and vitality is impaired, the discharge from the ponds must cease immediately and this department must be immediately notified of the circumstances. The daily monitoring reports associated with the holding ponds must be maintained and submitted to this department on a quarterly basis with the Discharge Monitoring Reports (DMRs).
6. The tissue of the fish in the holding ponds must be analyzed annually for the various organic and inorganic toxins that were used in environmental toxicology research in the previous year. The results of the analysis shall be summarized and submitted to this department with the fourth quarter DMR.
7. The volume flow of the wastewater discharged from the treatment system and the artesian diluent water must be monitored continuously and summarized on quarterly DMRs.

8. The quality of the treated effluent must be monitored monthly for the constituents associated with any experiments conducted. The results of these analyses must be summarized and submitted with the quarterly DMRs.
9. The permittee must inform this department in quarterly DMRs listing the experimental activities that involved the addition of toxic chemicals or mixtures in environmental toxicology experiments prior to treatment in the wastewater treatment system.

In addition, the permit contains Whole Effluent Toxicity (WET) limits and self-monitoring requirements. On a quarterly basis, the effect of the treated effluent on two aquatic species must be tested. Acute toxicity occurs when 50 percent or more mortality is observed at any effluent concentration. This information will be evaluated to ensure the receiving water is being protected.

**ANTIDegradation, IMPAIRMENT REVIEW:** The discharge of wastewater and the effluent limits that are established in this permit have been reviewed to ensure that the levels of water quality necessary to protect the designated uses of the receiving waters are maintained and protected. An antidegradation review has been conducted and verifies that the permit conditions, including the effluent limitations established, provide a level of protection to the receiving water consistent with the antidegradation provisions of Wyoming surface water quality standards. DEQ reviewed the 303(d) list to determine the status of the receiving water as a waterbody that cannot support designated uses. The review revealed that the receiving water is not on this list.

Self-monitoring of effluent quality and quantity is required on a regular basis with reporting of results quarterly. The permit is scheduled to expire on October 31, 2019.

Roland Peterson  
Water Quality Division  
Department of Environmental Quality  
Drafted: December 12, 2014

AUTHORIZATION TO DISCHARGE UNDER THE  
WYOMING POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, (hereinafter referred to as "the Act"), and the Wyoming Environmental Quality Act,

University of Wyoming

is authorized to discharge from the wastewater treatment facilities serving the

Red Buttes Laboratory

located in

NENW Section 21 Township 14N, Range 73W, Albany County

to receiving waters named

Lake Leazenby (2AB), North Platte River Basin

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II and III hereof.

This permit shall become effective on upon date of issuance below.

This permit and the authorization to discharge shall expire October 31, 2019 at midnight.

\_\_\_\_\_  
Kevin Frederick, Administrator  
Water Quality Division

\_\_\_\_\_  
Todd Parfitt, Director  
Department of Environmental Quality

Date of Issuance: \_\_\_\_\_

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. Effective immediately and lasting through October 31, 2019 the quality of effluent discharged by the permittee shall, at a minimum, meet the limitations set forth below. The permittee is authorized to discharge from outfall serial number(s) 001.

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		
	<u>Monthly Average</u>	<u>Weekly Average</u>	<u>Daily Maximum</u>
pH	N/A	N/A	6.5-9.0
TSS	30	45	90
Flow, gpd	6000	N/A	N/A

At outfall 001:

The pH shall not be less than 6.5 standard units nor do greater than 9.0 standard units in any single grab sample.

There shall be no discharge of floating solids or foam in other than trace amounts. Nor shall the discharge have a visible sheen or cause formation of a visible sheen or visible deposits on the bottom or shoreline of the receiving water.

All waters shall be discharged in a manner to prevent erosion, scouring, or damage to stream banks, stream beds, ditches, or other waters of the state at the point of discharge. Discharges shall not occur in such a manner that will result in violations of Water Quality Rules and Regulations, Chapter 1, Section 15. In addition, there shall be no deposition of substances in quantities which could result in significant aesthetic degradation or degradation of habitat for aquatic life, plant life or wildlife; or which could adversely affect public water supplies or those intended for agricultural or industrial use.

**Monitoring Requirements**

<u>Parameter</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
TSS, mg/L (at outfall 001)*	Monthly	Grab
pH, standard units (at outfall 001)*	Monthly	Grab
Flow, gpd, wastewater (see “b.” below)	Monthly	Continuous
Flow, gpd, artesian dilution water (see “c.” below)	Monthly	Continuous
Parameters of concern (see “h.” below)	Monthly	Grab

\*Samples taken in compliance with the monitoring requirements specified above shall be taken at the outfall from the final treatment unit and prior to admixture with diluent water or the receiving stream.

- a. The treatment system must be operated at maximum capability and efficiency;
- b. The volume of wastewater discharged from the treatment system may not exceed 6,000 gpd;
- c. Prior to discharge, each gallon of treated wastewater must be mixed with at least fifty (50) gallons of uncontaminated artesian well water. The mixed water must then be routed through a series of three holding ponds. These ponds shall contain viable populations of various fish species, at least one of which must be trout;
- d. The health and vitality of the fish in the holding ponds must be monitored on a daily basis. If the health and vitality is impaired, the discharge from the ponds must cease immediately and this department must be immediately notified of the circumstances. Wastewater discharges shall not resume until specifically authorized by the permit issuing authority. The daily monitoring reports associated with the holding ponds must be maintained and submitted to this department on a quarterly basis with the Discharge Monitoring Reports (DMRs);
- e. The tissue of the fish in the holding ponds must be analyzed annually. The results of the analysis shall be summarized and submitted to this department with the fourth quarter DMR.
- f. The volume of the wastewater discharged from the treatment system and the artesian diluent water must be monitored continuously and summarized on quarterly DMRs;
- g. Whenever a change in experimental activities may significantly affect the quality or quantity of the discharge, the permittee shall inform this department of the intended change, when such change is expected to occur and the expected impact on the discharge quality and quantity.
- h. The quality of the treated effluent must be monitored monthly for the constituents associated with any experiments conducted. The results of these analyses must be summarized and submitted with the quarterly DMRs;

2. Effluent Limitations (Toxic Pollutants)

Effective immediately there shall be no acute toxicity in the discharge from the Red Buttes Environmental Biology Laboratory to Lake Leazenby.

3 Whole Effluent Testing (Acute).

Starting in the first quarter of calendar year 2015, the permittee shall, at least once each calendar quarter, conduct acute static replacement toxicity tests on a grab sample of the discharge. Quarterly samples shall be collected on a two (2) day progression; i.e., if the first quarterly sample is on a Monday, during the next quarter, sampling shall begin on a Wednesday, etc. ***Because of logistics involved with getting samples to the contract laboratory to be analyzed before expiration of hold times, WET sampling is not required on Friday, Saturday, or Sunday.***

The replacement static toxicity tests shall be conducted in accordance with the procedures set out in 40 CFR 136 and the most current edition of *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, EPA-821/R-02-012. In the case of conflicts in method, 40 CFR 136 will prevail. The permittee shall conduct an acute 48-hour static toxicity test using *Ceriodaphnia dubia* and an acute 96-hour static toxicity test using *Pimephales promelas*. All tests will be conducted utilizing a multi-dilution series consisting of at least five (5) concentrations and a control as defined below:

- 100% effluent
- 62.5% effluent
- 50% effluent
- 25% effluent
- 12.5% effluent
- control (or 0% effluent)

In the event of inconclusive test results, the WDEQ reserves the right to require the permittee to perform additional tests at alternate dilutions and/or replicates. The WDEQ also reserves the right to require the submission of all information regarding all initiated tests, regardless of whether the tests were carried to completion or not.

Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration. If more than 10 percent control mortality occurs, the test is not valid. The test shall be repeated until satisfactory control survival is achieved.

If acute toxicity occurs, an additional test shall be conducted within two (2) weeks of the date of when the permittee learned of the test failure. If only one species fails, retesting may be limited to this species. Should acute toxicity occur in the second test, testing shall occur once a month until further notified by the permit issuing authority. The permittee shall promptly take all reasonable measures necessary to immediately reduce toxicity if the suspected toxicant is known.

Quarterly test results shall be reported along with the Discharge Monitoring Report (DMR) submitted for the end of the reporting calendar quarter (e.g., whole effluent results for the calendar quarter ending March 31, shall be reported with the DMR due April 28, with the remaining reports submitted with DMRs due each July 28, October 28 and January 28). Monthly test results shall be reported along with the DMR submitted for that month and shall include all chemical and physical data as specified.

If the results for five consecutive quarters of testing indicate no acute toxicity, the permittee may request the permit issuing authority to allow a reduction to quarterly acute toxicity testing on only one species on an alternating basis. The permit issuing authority may approve or deny the request based on the results and other available information without an additional public notice. If the request is approved, the test procedures are to be the same as specified above for the test species.

4. Toxicity Reduction Evaluation (TRE) and Toxicity Identification Evaluation (TIE)

Should toxicity be detected in the permittee's discharge, a TIE-TRE shall be undertaken by the permittee to establish the cause of the toxicity, locate the source(s) of the toxicity,

and develop control of, or treatment for the toxicity. Failure to initiate, or conduct an adequate TIE-TRE, or delays in the conduct of such tests, shall not be considered a justification for noncompliance with the whole effluent toxicity limits contained in this permit. A TRE plan needs to be submitted to the permitting authority within 45 days after confirmation of the continuance of effluent toxicity.

5. Chronic Toxicity Limitation-Reopener Provision

This permit may be reopened and modified (following proper administrative procedures) to include chronic whole effluent toxicity limitations if any other information or data are developed indicating that chronic whole effluent toxicity limits are needed as required under 40 CFR 122.44 (d).

If acceptable to the permit issuing authority, and if in conformance with current regulations, this permit may be reopened and modified to incorporate TRE conclusions relating to additional numerical limitations, a modified compliance schedule, and or modified whole effluent protocol.

B. MONITORING AND REPORTING

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and approval by, the permit issuing authority.

2. Reporting

Effluent monitoring results obtained during the previous three month(s) shall be summarized and reported on a Discharge Monitoring Report Form. If the permit requires whole effluent toxicity (WET) (biomonitoring) testing, WET test results must be reported on the most recent version of EPA Region 8 Guidance for Whole Effluent Reporting. Legible copies of these, and all other reports required herein, shall be signed and certified in accordance with the Signatory Requirements (see Part II.A.11.), and submitted to the state water pollution control agency at the following address. The reports must be received by the agency no later than the 28th day of the month following the completed reporting period. The first report is due April 28, 2015.

Wyoming Department of Environmental Quality  
Water Quality Division  
Herschler Building, 4 West  
122 West 25th Street  
Cheyenne, WY 82002  
Telephone: (307) 777-7781



If no discharge occurs during the reporting period, "no discharge" shall be reported. If discharge is intermittent during the reporting period, sampling shall be done while the facility is discharging.

3. Definitions

Concentration Values

- a. Daily Maximum (mg/L) - The highest single reading from any grab or composite sample collected during the reporting period.
- b. Monthly Average (mg/L) - The arithmetic mean (geometric mean in the case of fecal coliform and E. coli) of all composite and/or grab samples collected during a calendar month.
- c. Weekly Average (mg/L) - The arithmetic mean (geometric mean in the case of fecal coliform and E. coli) of all composite and/or grab samples collected during any week. A week begins at 12:01 a.m. Sunday morning and ends at 12:00 midnight Saturday evening.

Quantity Values

- d. Daily Maximum - The highest single daily quantity reading (see Calculations below) recorded during the reporting period.
- e. Monthly Average - The arithmetic mean (geometric mean in the case of fecal coliform and E. coli bacteria) of all the daily quantity readings (see Calculations below) recorded during a calendar month.
- f. Weekly Average - The arithmetic mean (geometric mean in the case of fecal coliform and E. coli bacteria) of all the daily quantity readings (see Calculations below) recorded during a week. A week begins at 12:01 a.m. Sunday morning and ends at 12:00 midnight Saturday evening.

Flow Values

- g. Daily Flow - The flow volume recorded on any single day. The daily flow volume may be determined by using an instantaneous reading (if authorized by this permit) or a continuous recorder.
- h. Daily Maximum Flow - The highest single daily flow reading recorded during a reporting period.
- i. Monthly Average Flow - The arithmetic mean of all daily flow values recorded during a calendar month.
- j. Weekly Average Flow - The arithmetic mean of all daily flow values recorded during a week. A week begins at 12:01 am on Sunday morning and ends at 12:00 midnight Saturday evening.

Calculations

- k. Daily Quantity (kg/day) - The quantity, in kilograms per day, of pollutant discharged on a single day. The Daily quantity shall be calculated by multiplying the composite or grab sample concentration value for that day in milligrams/liter (mg/L) times the flow volume (in millions of gallons per day - MGD) for that day times 3.78. If a flow volume reading for the day the sample is collected is not available, the average flow volume reading for the entire reporting period shall be used.
- l. Daily Quantity (#/day) - The quantity, in number per day, of bacteria or other pollutants discharged on a single day. The number per day shall be calculated by multiplying the composite or grab sample result for that day, in number per 100 milliliters (#/100 ml), times the flow volume (in millions of gallons per day - MGD) times  $3.78 \times 10^7$ . If a flow volume reading for the day the sample is collected is not available, the average flow volume reading for the entire reporting period shall be used.
- m. Geometric Mean - Calculated in accordance with the procedure described in the most recent edition of "Standard Methods for the Examination of Water and Wastewater".

Miscellaneous

- n. A "composite" sample, for monitoring requirements, is defined as a minimum of four (4) grab samples collected at equally spaced two (2) hour intervals and proportioned according to flow.
- o. An "instantaneous" measurement for monitoring requirements is defined as a single reading, measurement, or observation.
- p. "MGD", for monitoring requirements, is defined as million gallons per day.
- q. "Net" value, if noted under Effluent Characteristics, is calculated on the basis of the net increase of the individual parameter over the quantity of that same parameter present in the intake water measured prior to any contamination or use in the process of this facility. Any contaminants contained in any intake water obtained from underground wells shall not be adjusted for as described above and, therefore, shall be considered as process input to the final effluent. Limitations in which "net" is not noted are calculated on the basis of gross measurements of each parameter in the discharge, irrespective of the quantity of those parameters in the intake waters.
- r. A "pollutant" is any substance or substances that, if allowed to enter surface waters of the state, causes or threatens to cause pollution as defined in the Wyoming Environmental Quality Act, Section 35-11-103.

4. Test Procedures

Test procedures for the analysis of pollutants, collection of samples, sample containers, sample preservation, and holding times, shall conform to regulations published pursuant to 40 CFR, Part 136, unless other test procedures have been specified in this permit.

5. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date and time of sampling;
- b. The dates and times the analyses were performed;
- c. The person(s) who performed the analyses and collected the samples;
- d. The analytical techniques or methods used; and
- e. The results of all required analyses including the bench sheets, instrument readouts, computer disks or tapes, etc., used to determine the results.

6. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form. Such increased frequency shall also be indicated.

7. Records Retention

The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the administrator at any time. Data collected on site, copies of Discharge Monitoring Reports and a copy of this WYPDES permit must be maintained on site during the duration of activity at the permitted location.

8. Penalties for Tampering

The Act provides that any person who falsifies, tampers with or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two (2) years per violation, or both.

9. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on interim and final requirements contained in any Compliance Schedule of this permit shall be submitted no later than 14 days following each schedule date.

10. Location of Discharge Points

TABLE 1  
OUTFALLS  
WY0032336, Red Buttes Laboratory

Outfall	Qtr/Qtr	Qtr	Section	Township	Range	Latitude	Longitude	Receiving Water
001	NE	NW	21	14N	73W	41.1743	-105.58437	Lake Leazenby (class 2AB water), North Platte River Basin

**TABLE 1**

<b>Outfall</b>	<b>Qtr/Qtr</b>	<b>Section</b>	<b>Township-North</b>	<b>Range-West</b>	<b>Latitude</b>	<b>Longitude</b>	<b>Receiving Water</b>
001*	NE	21	14N	73W	41.17468	-105.584549	Lake Leazenby (2AB), North Platte River Basin
*Asterisk denotes outfalls for which WDEQ has field-verified the Latitude and Longitude locations. These are considered to be the most accurate location data available for these outfalls, and will supersede Latitude and Longitude values presented in the application.							

PART II

A. MANAGEMENT REQUIREMENTS

1. Changes

The permittee shall give notice to the administrator of the Water Quality Division as soon as possible of any physical alterations or additions to the permitted facility. Notice is required when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source as determined in 40 CFR 122.29 (b); or
- b. The alteration or addition could change the nature or increase the quantity of pollutants discharged.

2. Noncompliance Notification

- a. The permittee shall give advance notice of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- b. The permittee shall report any noncompliance which may endanger health or the environment as soon as possible, but no later than 24 hours from the time the permittee first became aware of the circumstances. The report shall be made to the Water Quality Division, Wyoming Department of Environmental Quality at (307) 777-7781.
- c. For any incidence of noncompliance, including noncompliance related to non-toxic pollutants or non-hazardous substances, a written submission shall be provided within five (5) days of the time that the permittee becomes aware of the noncompliance circumstance.

The written submission shall contain:

- (1) A description of the noncompliance and its cause;
  - (2) The period of noncompliance, including exact dates and times;
  - (3) The estimated time noncompliance is expected to continue if it has not been corrected; and
  - (4) Steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance.
- d. The following occurrences of unanticipated noncompliance shall be reported by telephone to the Water Quality Division, Watershed Management Section, WYPDES Program (307) 777-7781 as soon as possible, but no later than 24 hours from the time the permittee first became aware of the circumstances.

- (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;
  - (2) Any upset which exceeds any effluent limitation in the permit; or
  - (3) Violation of a maximum daily discharge limitation for any toxic pollutants or hazardous substances, or any pollutants specifically identified as the method to control a toxic pollutant or hazardous substance listed in the permit.
- e. The administrator of the Water Quality Division may waive the written report on a case-by-case basis if the oral report has been received within 24 hours by the Water Quality Division, WYPDES Program (307) 777-7781.
- f. Reports shall be submitted to the Wyoming Department of Environmental Quality at the address in Part I under Reporting and to the Planning and Targeting Program, 8ENF-PT, Office of Enforcement, Compliance, and Environmental Justice, U.S. EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129.
- g. The permittee shall report all instances of noncompliance that have not been specifically addressed in any part of this permit at the time the monitoring reports are due.

3. Facilities Operation

The permittee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of the permit. However, the permittee shall operate, as a minimum, one complete set of each main line unit treatment process whether or not this process is needed to achieve permit effluent compliance.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize any adverse impact to waters of the state resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypass of Treatment Facilities

- a. Bypass means the intentional diversion of waste streams from any portion of a treatment facility.
- b. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of

paragraphs c. and d. of this section. Return of removed substances to the discharge stream shall not be considered a bypass under the provisions of this paragraph.

c. Notice:

- (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice at least 60 days before the date of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required under Part II.A.2.

d. Prohibition of bypass.

- (1) Bypass is prohibited and the administrator of the Water Quality Division may take enforcement action against a permittee for a bypass, unless:
  - (a) The bypass was unavoidable to prevent loss of life, personal injury or severe property damage;
  - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - (c) The permittee submitted notices as required under paragraph c. of this section.

e. The administrator of the Water Quality Division may approve an anticipated bypass, after considering its adverse effects, if the administrator determines that it will meet the three conditions listed above in paragraph d. (1) of this section.

6. Upset Conditions

- a. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improper designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of paragraph c. of this section are met.



- c. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:
- (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
  - (2) The permitted facility was at the time being properly operated;
  - (3) The permittee submitted notice of the upset as required under Part II.A.2; and
  - (4) The permittee complied with any remedial measures required under Part II.A.4.
- d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

7. Removed Substances

Solids, sludges, filter backwash or other pollutants removed in the course of treatment or control of wastewaters or intake waters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state.

8. Power Failures

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. In accordance with a schedule of compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities; or
- b. If such alternative power source as described in paragraph a. above is not in existence and no date for its implementation appears in Part I, take such precautions as are necessary to maintain and operate the facility under its control in a manner that will minimize upsets and insure stable operation until power is restored.

9. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the federal act and the Wyoming Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. The permittee shall give the administrator of the Water Quality Division advance notice of any planned changes at the permitted facility or of any activity which may result in permit noncompliance.

10. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

11. Signatory Requirements

All applications, reports or information submitted to the administrator of the Water Quality Division shall be signed and certified.

- a. All permit applications shall be signed as follows:
  - (1) For a corporation: by a responsible corporate officer;
  - (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
  - (3) For a municipality, state, federal or other public agency: by either a principal executive officer or ranking elected official.
- b. All reports required by the permit and other information requested by the administrator of the Water Quality Division shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - (1) The authorization is made in writing by a person described above and submitted to the administrator of the Water Quality Division; and
  - (2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
- c. If an authorization under paragraph II.A.11.b. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph II.A.11.b must be submitted to the administrator of the Water Quality Division prior to or together with any reports, information or applications to be signed by an authorized representative.
- d. Any person signing a document under this section shall make the following certification:

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the

system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

B. RESPONSIBILITIES

1. Inspection and Entry

If requested, the permittee shall provide written certification from the surface landowner(s), if different than the permittee, that the administrator or the administrator's authorized agent has access to all physical locations associated with this permit including well heads, discharge points, reservoirs, monitoring locations, and any waters of the state.

The permittee shall allow the administrator of the Water Quality Division or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and
- d. Sample or monitor, at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the federal act, any substances or parameters at any location.

2. Transfer of Ownership or Control

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the regional administrator of the Environmental Protection Agency and the administrator of the Water Quality Division. The administrator of the Water Quality Division shall then provide written notification to the new owner or controller of the date in which they assume legal responsibility of the permit. The permit may be modified or revoked and reissued to change the name of the permittee and incorporate such other requirements as described in the federal act.

3. Availability of Reports

Except for data determined to be confidential under Section 308 of the federal act, all reports prepared in accordance with the terms of this permit shall be available for public

inspection at the offices of the Wyoming Department of Environmental Quality and the regional administrator of the Environmental Protection Agency. As required by the federal act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the federal act.

4. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established under Section 307 (a) of the federal act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Changes in Discharge of Toxic Substances

Notification shall be provided to the administrator of the Water Quality Division as soon as the permittee knows of, or has reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - (1) One hundred micrograms per liter (100 µg/l);
  - (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
  - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21 (g) (7); or
  - (4) The level established by the director of the Environmental Protection Agency in accordance with 40 CFR 122.44 (f).
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - (1) Five hundred micrograms per liter (500 µg/l);
  - (2) One milligram per liter (1 mg/l) for antimony;
  - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21 (g) (7); or

- (4) The level established by the director of the Environmental Protection Agency in accordance with 40 CFR 122.44 (f).

6. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. As long as the conditions related to the provisions of "Bypass of Treatment Facilities" (Part II.A.5), "Upset Conditions" (Part II.A.6), and "Power Failures" (Part II.A.8) are satisfied then they shall not be considered as noncompliance.

7. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

8. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject under Section 311 of the federal act.

9. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state or federal law or regulation. In addition, issuance of this permit does not substitute for any other permits required under the Clean Water Act or any other federal, state, or local law.

10. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights nor any infringement of federal, state or local laws or regulations.

11. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The application should be submitted at least 180 days before the expiration date of this permit.

12. Duty to Provide Information

The permittee shall furnish to the administrator of the Water Quality Division, within a reasonable time, any information which the administrator may request to determine whether cause exists for modifying, revoking and reissuing or terminating this permit or

to determine compliance with this permit. The permittee shall also furnish to the administrator, upon request, copies of records required by this permit to be kept.

13. Other Information

When the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or any report to the administrator of the Water Quality Division, it shall promptly submit such facts or information.

14. Permit Action

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

PART III

A. OTHER REQUIREMENTS

1. Flow Measurement

At the request of the administrator of the Water Quality Division, the permittee must be able to show proof of the accuracy of any flow measuring device used in obtaining data submitted in the monitoring report. The flow measuring device must indicate values of within plus or minus ten (10) percent of the actual flow being measured.

2. 208(b) Plans

This permit may be modified, suspended or revoked to comply with the provisions of any 208(b) plan certified by the Governor of the State of Wyoming.

3. Reopener Provision

This permit may be reopened and modified (following proper administrative procedures) to include the appropriate effluent limitations (and compliance schedule, if necessary) or other appropriate requirements if one or more of the following events occurs:

- a. The state water quality standards of the receiving water(s) to which the permittee discharges are modified in such a manner as to require different effluent limits than contained in this permit;
- b. A total maximum daily load (TMDL) and/or watershed management plan is developed and approved by the state and/or the Environmental Protection Agency which specifies a wasteload allocation for incorporation in this permit;
- c. A revision to the current water quality management plan is approved and adopted which calls for different effluent limitations than contained in this permit;
- d. Downstream impairment is observed and the permitted facility is contributing to the impairment;
- e. The limits established by the permit no longer attain and/or maintain applicable water quality standards;
- f. The permit does not control or limit a pollutant that has the potential to cause or contribute to a violation of a state water quality standard.
- g. If new applicable effluent guidelines and/or standards have been promulgated and the standards are more stringent than the effluent limits established by the permit.
- h. In order to protect water quality standards in neighboring states, effluent limits may be incorporated into this permit or existing limits may be modified to ensure that the appropriate criteria, water quality standards and assimilative capacity are attained.

4. Permit Modification

After notice and opportunity for a hearing, this permit may be modified, suspended or revoked in whole or in part during its term for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge; or
- d. If necessary to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b) (2) (C) and (D), 304 (b) (2) and 307 (a) (2) of the federal act, if the effluent standard or limitation so issued or approved:
  - (1) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
  - (2) Controls any pollutant not limited in the permit.

5. Toxicity Limitation - Reopener Provision

This permit may be reopened and modified (following proper administrative procedures) to include a new compliance date, additional or modified numerical limitations, a new or different compliance schedule, a change in the whole effluent protocol or any other conditions related to the control of toxicants if one or more of the following events occur:

- a. Toxicity was detected late in the life of the permit near or past the deadline for compliance;
- b. The toxicity reduction evaluation (TRE) results indicate that compliance with the toxic limits will require an implementation schedule past the date for compliance and the permit issuing authority agrees with the conclusion;
- c. The TRE results indicate that the toxicant(s) represent pollutant(s) that may be controlled with specific numerical limits and the permit issuing authority agrees that numerical controls are the most appropriate course of action;
- d. Following the implementation of numerical controls on toxicants, the permit issuing authority agrees that a modified whole effluent protocol is necessary to compensate for those toxicants that are controlled numerically;
- e. The TRE reveals other unique conditions or characteristics which, in the opinion of the permit issuing authority, justify the incorporation of unanticipated special conditions in the permit.



6. Severability

The provisions of this permit are severable and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit, shall not be affected thereby.

7. Penalties for Falsification of Reports

The federal act provides that any person who knowingly makes any false statement, representation or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation or by imprisonment for not more than two years per violation or both.